

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A substrate processing apparatus, comprising:
 - a substrate holder capable of holding plural substrates;
 - a processing chamber which houses the substrates held by the substrate holder;

and

a heater which heats the processing chamber;
wherein the substrate holder includes:

- at least three support columns provided substantially vertically;
- plural substrate mounting portions which mount the plural substrates substantially horizontally at a predetermined interval, the substrate mounting portions being provided at multi-stages on the support columns so as to protrude from the support columns;
- plural ring-like plates which surround the at least three support columns, are provided at multi-stages on the support columns, and are provided substantially horizontally at a predetermined interval with respect to the substrates supported on the substrate mounting portions; and
- notches which are formed by notching inner circumferential surfaces of the ring-like plates, the inner circumferential surfaces being opposite to the support columns, on a periphery of the support columns, the support columns being fitted into the ~~notches~~
notches and being disposed inside an outer periphery of the ring-like plates.

2. (Previously Presented) The substrate processing apparatus according to claim 1, wherein the substrate mounting portions are columnar shape or approximately semi-columnar shape.

3. (Original) The substrate processing apparatus according to claim 2, wherein the substrate mounting portions are inclined downward toward an inside of the ring-like plates in a diameter direction.

4-5. (Canceled)

6. (Previously Presented) The substrate processing apparatus according to claim 2, wherein tips of the substrate mounting portions are rounded or chamfered.

7. (Canceled)

8. (Previously Presented) The substrate processing apparatus according to claim 1, wherein the support columns are composed into an approximately semi-columnar shape, and the substrate mounting portions are protruded on a chord side of the support columns.

9. (Original) The substrate processing apparatus according to claim 8, wherein, on the chord side, an inside thereof in a diameter direction of the ring-like plates is scooped out.

10. (Canceled)

11. (Currently Amended) A substrate processing apparatus, comprising:
a substrate holder capable of holding plural substrates;
a processing chamber which houses the substrates held by the substrate holder;

and

a heater which heats the processing chamber;

wherein the substrate holder includes:

at least three support columns provided substantially vertically;
plural ring-like plates which surround the at least three support columns, are provided at multi-stages on the support columns, and are provided substantially

horizontally at a predetermined interval with respect to the substrates held by the substrate holder; and

notches which are formed by notching inner circumferential surfaces of the ring-like plates, the inner circumferential surfaces being opposite to the support columns, on a periphery of the support columns, the support columns being fitted into the ~~notches~~, notches and being disposed inside an outer periphery of the ring-like plates.

12. (Previously Presented) The substrate processing apparatus according to claim 11, wherein the support columns are composed into an approximately semi-columnar shape, and the substrate mounting portions are protruded on a chord side of the support columns.

13. (Canceled)

14. (Original) The substrate processing apparatus according to claim 12, wherein, on the chord side, an inside thereof in a diameter direction of the ring-like plates is scooped out.

15. (Currently Amended) A substrate holder capable of holding plural substrates, comprising:

at least three support columns provided substantially vertically; plural substrate mounting portions which mount the plural substrates substantially horizontally at a predetermined interval, the substrate mounting portions being provided at multi-stages on the support columns, so as to protrude from the support columns; and

plural ring-like plates which surround the at least three support columns, are provided at multi-stages on the support columns, and provided substantially horizontally at a predetermined interval with respect to the substrates supported on the substrate mounting portions,

wherein notches are formed by notching inner circumferential surfaces of the ring-like plates, the inner circumferential surfaces being opposite to the support columns, on a periphery of the support columns, and the support columns are fitted into the ~~notches~~notches and being disposed inside an outer periphery of the ring-like plates.

16. (Cancelled)

17. (Currently Amended) A substrate holder capable of holding plural substrates, comprising:

at least three support columns provided substantially vertically; and
plural ring-like plates which surround the at least three support columns, are provided at multi-stages on the support columns, and are provided substantially horizontally at a predetermined interval with respect to the substrates held by the substrate holder,

wherein notches are formed by notching inner circumferential surfaces of the ring-like plates, the inner circumferential surfaces being opposite to the support columns, on a periphery of the support columns, and the support columns are fitted into the ~~notches~~notches and being disposed inside an outer periphery of the ring-like plates.

18. (Currently Amended) A method of manufacturing a semiconductor device, the method using a substrate processing apparatus including: a substrate holder capable of holding plural substrates; a processing chamber which houses the substrates held by the substrate holder; a heater which heats the processing chamber; and a gas supply pipe which supplies processing gas to the processing chamber heated by the heater, thereby processing the substrate, wherein the substrate holder includes: at least three support columns provided substantially vertically; plural substrate mounting portions which mount the plural substrates substantially horizontally at a predetermined interval, the substrate mounting portions being provided at multi-stages on the support columns so as to protrude from the support columns; plural ring-like plates which surround the at least three support columns, are provided at

multi-stages on the support columns, and are provided substantially horizontally at a predetermined interval with respect to the substrates supported on the substrate mounting portions; and notches which are formed by notching inner circumferential surfaces of the ring-like plates, the inner circumferential surfaces being opposite to the support columns, on a periphery of the support columns, the support columns being fitted into the notches, notches and being disposed inside an outer periphery of the ring-like plates, the method comprising:

mounting the substrates on the substrate mounting portions of the substrate holder;

carrying the substrates mounted on the substrate mounting portions of the substrate holder into the processing chamber;

heating the processing chamber by the heater; and

supplying the processing gas to the heated processing chamber by the gas supply pipe, thereby processing the substrate.

19. (Previously Presented) The substrate processing apparatus according to claim 1, wherein an open width of the notch is larger than a width of the substrate mounting portion.

20. (Previously Presented) The substrate processing apparatus according to claim 1, wherein an open width of the notch is larger than an outside diameter of the support columns.

21. (Previously Presented) The substrate processing apparatus according to claim 1, wherein the notch comprises:

a fitting portion as a hole into which the support columns is fitted; and
an opening which opens the fitting portion to the inner circumferential direction of the ring-like plate.

22. (Previously Presented) The substrate processing apparatus according to claim 11, wherein an open width of the notch is larger than an outside diameter of a corresponding support column.

23. (Previously Presented) The substrate processing apparatus according to claim 11, wherein the notch comprises:

a fitting portion as a hole into which the support columns is fitted; and
an opening which opens the fitting portion to the inner circumferential direction of the ring-like plate.

24. (Previously Presented) The substrate processing apparatus according to claim 15, wherein an open width of the notch is larger than a width of the substrate mounting portion.

25. (Previously Presented) The substrate processing apparatus according to claim 15, wherein an open width of the notch is larger than an outside diameter of a corresponding support column.

26. (Previously Presented) The substrate processing apparatus according to claim 15, wherein the notch comprises:

a fitting portion as a hole into which a corresponding support column is fitted;
and
an opening which opens the fitting portion to the inner circumferential direction of the ring-like plate.

27. (Canceled)

28. (Previously Presented) The substrate holder according to claim 15, wherein the support columns are composed into an approximately semi-columnar shape, and the substrate mounting portions are protruded on a chord side of the support columns.

29. (Previously Presented) The substrate holder according to claim 28, wherein, on the chord side, an inside thereof in a diameter direction of the ring-like plates is fretted.